

§Appl. No. 09/930,213
Amdt. dated February 24, 2004
Reply to Office Action of, October 24, 2004

This listing of claims will replace all prior versions, and listings, of claims
in the application:

Listing of Claims:

Claim 1 (Amended) Nucleic acid,
characterized in that
it shows a differential expression in tumor cells and normal cells, comprising
(a) one of the nucleic acid sequences shown in SEQ ID NOS 336-885 Fig. 11,
(b) partial sequences thereof with a length of at least 50, preferably at least 100, and especially
preferably at least 200 nucleotides,
(c) a sequence that hybridizes with a sequence that consists of (a) and/or (b) under stringent
conditions, and/or
(d) a sequence that is complementary to a sequence that consists of (a), (b) and/or (c).

Claim 2 (Original) Nucleic acid according to claim 1,
wherein
the tumor cells are selected from rat fibroblasts that are transformed with H-Ras, N-Ras and K-Ras.

Claim 3 (Previously Presented) The nucleic acid according to claim 1, wherein said normal
cells are 208F rat fibroblasts.

Claim 4 (Previously Presented) The nucleic acid according to claim 1, wherein said nucleic
acid shows an enhanced expression in a Ras-transformed cell line in comparison to a non-
transformed cell line or is expressed *de novo* in a Ras-transformed cell line.

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Claim 5 (Previously Presented) The nucleic acid according to claim 1, wherein the expression of said nucleic acid in Ras-transformed cells is adjusted down.

Claim 6 (Amended) Nucleic acid according to claim 4, wherein it comprises one of SEQ ID NOS 336-632 ~~sequences N1-N297 according to Fig. 11~~ or a sequence that thus hybridizes under stringent conditions.

Claim 7 (Amended) Nucleic acid according to claim 6, selected from the sequences that are not yet described as mRNA in rats:

N 100, N103, N104, N105, N106, N107, N109, N1 10, N1 11, N1 12, N113, N114, N115, N116, N117, N118, N12, N120, N121, N122, N124, N125, N126, N127, N128, N129, N13, N130, N131, N133, N134, N135, N136, N137, N138, N139, N14, N140, N141, N143, N144, N145, N146, N147, N148, N149, N150, N151, N152, N153, N154, N156, N157, N158, N16, N160, N161, N162, N163, N164, N165, N166, N167, N168, N169, N17, N170, N171, N172, N173, N174, N175, N176, N177, N178, N18, N180, N181, N182, N183, N184, N185, N186, N187, N1881-N189, N19, N190, N191, N192, N193, N194, N195, N196, N197, N198, N199, N2, N20, N201, N202, N203, N204, N205, N206, N207, N208, N209, N21, N210, N211, N212, N213, N214, N215, N216, N217, N218, N219, N22, N220, N221, N222, N223, N224, N225, N226, N227, N228, N229, N23, N230, N231, N232, N234, N236, N237, N238, N239, N24, N240, N241, N242, N244, N246, N247, N248, N249, N25, N250, N251, N252, N253, N254, N255, N256, N257, N258, N259, N260, N261, N262, N263, N264, N265, N267, N268, N269, N270, N271, N272, N273, N274, N275, N276, N277, N278, N279, N28, N280, N281, N282, N283, N284, N285, N286, N287, N288, N289, N29, N290, N291, N292, N293, N294, N295, N296, N297, N30, N32, N35, N38, N4, N44, N46, N51, N55, N56, N57, N59, N60, N62, N64, N65, N68, N69, N71, N73, N74, N75, N76, N77, N78, N79, N80, N81, N82, N84, N86, N87, N88, N89, N9, N90, N91, N92, N93, N94, N96, N97, N98, N99.

Claim 8 (Amended) Nucleic acid according to claim 6, selected from sequences for which homologous sequences are described in model organisms, such as mice, chickens, *Xenopus*, *C. elegans*, *Drosophila*, but which are not known in humans:

N103, N105, N112, N113, N115, N116, N121, N127, N128, N13, N14, N151, N16, N163: N164, N17, N182, N184, N185, N189, N19, N199, N2, N20, N212, N225, N241, N249, N252, N257, N264, N269, N289, N29, N296, N30, N38, N4, N56, N57, N59, N60, N64, N65, N68, N69, N74, N9.

Claim 9 (Amended) Nucleic acid according to claim 5, wherein it comprises one of SEQ ID NOS 633-885 sequences ~~T1-T235 according to Fig. 11~~ or a sequence that thus hybridizes under stringent conditions.

Claim 10 (Amended) Nucleic acid according to claim 9 selected from the sequences that are not yet described as mRNA in rats:

T1, T100, T101, T102, T103, T104, T105, T106, T107, T108, T109, T110, T111, T112, T113, T114, T115, T116, T118, T119, T12, T120, T121, T122, T123, T124, T125, T126, T127, T128, T129, T130, T131, T134, T135, T136, T137, T14, T140, T141, T142, T144, T145, T146, T147, T148, T149, T150, T151, T152, T153, T154, T155, T156, T157, T158, T159, T160, T163, T164, T165, T168, T169, T17, T170, T171, T172, T173, T174, T175, T177, T178, T179, T18, T180, T181, T182, T183, T184, T185, T186, T187, T188, T189, T19, T190, T191, T192, T194, T195, T196, T197, T198, T199, T2, T20, T200, T201, T202, T203, T204, T205, T206, T207, T208, T209, T210, T211, T212, T213, T214, T215, T216, T217, T218, T219, T220, T221, T222, T223, T224, T225, T226, T227, T228, T229, T230, T231, T232, T233, T234, T235, T236, T237, T238, T239, T24, T241, T242, T243, T244, T245, T247, T248, T249, T25, T250, T251, T252, T253, T27, T28, T29, T3, T31, T32, T34, T35, T36, T37, T39, T4, T40, T42, T46, T48, T49, T50, T52, T58, T59, T60, T61,

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T62, T63, T65, T66, T68, T69, T7, T70, T73, T76, T77, T78, T79, T8, T81, T82, T83, T84, T85, T86, T87, T88, T9, T90, T91, T92, T94, T95, T96, T97, T99.

Claim 11 (Amended) Nucleic acid according to claim 9, selected from sequences for which homologous sequences are described in model organisms such as mice, chickens, *Xenopus*, *C. elegans*, *drosophila*, but which are not known in humans:

T1, T118, T121, T122, T137, T142, T18, T2, T20, T222, T232, T238, T25, T3, T31, T32, T35, T37, T49, T50, T59, T60, T63, T65, T69, T7, T73, T85.

Claim 12 (Previously Presented) The nucleic acid according to claim 1, wherein said nucleic acid has homology to human sequences, especially human ESTs or EST clusters.

Claim 13 (Amended) Nucleic acid according to claim 12, selected from

N1, N10, N101, N102, N103, N104,
N108, N109, N11, N112, N116, N12, N121, N122, N125, N126, N128, N129, N13, N131, N132, N134, N136, N137, N14, N142, N144, N148, N149, N151, N152, N154, N156, N158, N159, N160, N163, N165, N17, N175, N18, N180, N181, N182, N183, N186, N187, N188, N189, N192, N196, N198, N199, N20, N202, N204, N205, N207, N209, N21, N212, N213, N215, N218, N22, N228, N234, N235, N238, N242, N243, N248, N249, N250, N252, N253, N255, N256, N257, N26, N260, N261, N263, N264, N266, N267, N270, N271, N275, N28, N280, N283, N289, N29, N294, N3, N30, N31, N32, N34, N35, N36, N38, N39, N4, N40, N42, N43, N44, N45, N46, N48, N49, N5, N50, N51, N55, N58, N59, N61, N62, N65, N7, N70, N71, N74, N75, N77, N78, N79, N80, N81, N82, N85, N89, N92, T10, T100, T103, T105, T109, T11, T111, T116, T117, T118, T119, T120, T121, T124, T125, T129, T132, T133, T137, T138, T139, T14, T141, T143, T144, T146, T147, T148, T15, T153, T156, T159, T16, T160, T162, T163, T166, T17, T170, T172, T174, T175, T176, T182, T183, T185, T186, T188, T189, T19, T191, T192, T193, T196, T2, T20, T202, T204, T205,

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T208, T21, T211,
T212, T215, T216, T217, T219, T222, T223, T224, T225, T226, T227, T230, T232, T235, T237,
T238, T239, T240, T243, T244, T245, T25, T250, T251, T253, T27, T3, T31, T34, T35, T36, T37,
T38, T40, T42, T43, T44, T45, T47, T48, T49, T50, T54,
T58, T59, T6, T60, T61, T62, T64, T66, T67, T68, T69, T72, T73, T75, T76, T80, T82, T86, T88,
T89, T9, T94, T96, T98, _

Claim 14 (Original) Nucleic acid according to claim 13, wherein
it represents a human gene, a human cDNA or a partial sequence thereof and wherein the
corresponding rat-homologous gene shows a differential expression in tumor cells and normal cells.

Claim 15 (Amended) Nucleic acid according to claim 14, wherein
it comprises one of the sequences shown in SEQ ID NOS 1-335 ~~Figure 12~~.

Claim 16 (Withdrawn) The nucleic acid according to claim 1, wherein said nucleic acid is
arranged as an oligonucleotide or as cDNA on an array.

Claim 17 (Withdrawn) A method for diagnosing tumor cells comprising assaying differential
expression of a nucleic acid according to claim 1.

Claim 18 (Withdrawn) Use according to claim 17 for the production of an agent for tumor
diagnosis or tumor therapy.

Claim 19 (Withdrawn) The method according to claim 17, wherein the expression of said
nucleic acid is modulated.

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Claim 20 (Withdrawn) Use according to claim 19, wherein the modulation comprises a gene-therapy treatment of the nucleic acid.

Claim 21 (Withdrawn) Use according to claim 19, wherein the modulation comprises an administration of antisense-RNA or ribozymes.

Claim 22 (Withdrawn) The method according to claim 17, wherein the amount and/or localization of the polypeptide that is encoded by said nucleic acid is modulated.

Claim 23 (Withdrawn) Use according to claim 22, wherein the modulation comprises an administration of the polypeptide or an activator thereof.

Claim 24 (Withdrawn) Use according to claim 22, wherein the modulation comprises an administration of antibodies directed against the polypeptide or inhibitors of the polypeptide.

Claim 25 (Withdrawn) Process for testing the influence of active substances on the gene expression, wherein
an active substance is added to a cell line, RNA is isolated from the cell line, the RNA is labeled, then hybridized on an array, and then the gene expression profile of the cell line is obtained.

Claim 26 (Withdrawn) Process according to claim 25, wherein
the gene expression profile of cell line (a) that is treated with the active substance is compared to the gene expression profile of a cell line that is not treated with the active substance and/or (b) to the gene expression profile of a cell line that is treated with the active substance but is different.

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Claim 27 (New) A nucleic acid of claim 1, wherein said nucleic acid comprises the nucleotide sequence set forth in SEQ ID NO. 751.